

WHAT IS CLAIMED IS:

1. A pusher block and track combination comprising a track with a pair of raised rails, each rail having two generally T-shaped ridges, the combination further comprising a pusher block with two sets of opposing flanges, wherein each set of said two sets of opposing flanges attaches to one of said rails at more than the top and outside surface of said rail, whereby each said rail is captured between each corresponding set of opposing flanges.

2. The pusher block and track combination of Claim 1, wherein each rail has a tie down surface to the inside of each ridge and said opposing flanges include a set of inside flanges and a set of outside flanges, said inside flanges extend further below said pusher block than said outside flanges.

3. The pusher block and track combination of Claim 1 further comprising a spacer block which can be stably fitted onto said pusher block to increase the height and/or width to allow for use with taller or wider products.

4. The pusher block and track combination of Claim 2 wherein said inside flanges are formed on a single member extending below said pusher block.

5. The pusher block and track combination of Claim 4 wherein said single member comprises at least one chamfer.

6. The pusher block and track combination of Claim 4 wherein said single member comprises a top and bottom chamfer.

7. An adjustable display rack for storing and displaying products in a shelf-like orientation, said display rack comprising:

a frame having a front panel and a rear panel, said front panel and said rear panel being arranged generally parallel to each other and being separated by a fixed distance from one another, said front panel and said rear panel including races to allow attachment of product tracks and dividers;

one or more product tracks having raised rails extending between said front panel and said rear panel and being positioned generally transverse to said front panel;

a removable pusher block being slidably attached to said product track;  
a biasing member urging said pusher block forward; and

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at least one divider being positioned between two adjacent product tracks, wherein said product tracks and dividers are slidably attached to said front and rear races and allow for horizontal movement of said product tracks and dividers.

5           8.     The adjustable display rack of Claim 7, wherein said product track and said divider are formed in a single piece.

9.     The adjustable display rack of Claim 7, wherein said races extend the entire length of said front panel and said rear panel.

10           10.    The adjustable display rack of Claim 7, wherein said races are segmented.

11.    The adjustable display rack of Claim 7, wherein said biasing member is attached to said pusher block and said product track.

12.    The adjustable display rack of Claim 7, wherein said biasing member is attached to said pusher block and said frame.

15           13.    The display rack of Claim 7, wherein said front panel is taller than said rear panel.

14.    The adjustable display rack of Claim 7, wherein said front panel is transparent.

20           15.    The adjustable display rack of Claim 7, wherein said front panel is angled rearward toward said rear panel.

16.    The adjustable display rack of Claim 7, wherein said frame further comprises at least one side panel that is attached to said front panel and said rear panel by a removable fastener.

25           17.    The adjustable display rack of Claim 16, wherein said frame further comprises at least one side panel that is attached to said front panel and said rear panel by a permanent or semi-permanent fastener.

18.    The adjustable display rack of Claim 16, wherein said side panel is selected from the group consisting of: a product track, a divider, or a combined product track and divider.

19. The adjustable display rack of Claim 17, wherein said side panel is selected from the group consisting of: a product track, a divider, or a combined product track and divider.

20. The adjustable display rack of Claim 7, wherein said product tracks further comprise clips that are slidable in the races.

21. The adjustable display rack of Claim 7, wherein said product track comprises a pair of raised rails each having a generally T shape,

and wherein said pusher block includes at least two sets of opposing flanges, wherein each said set of opposing flanges capture an outside and inside edge of a corresponding one of said rails.

22. The adjustable display rack of Claim 7, wherein said biasing member is a roll spring.

23. The adjustable display rack of Claim 7, wherein said removable pusher block further comprises a spacer block which can be stably fitted onto said pusher block to increase the height and/or width for taller or wider products.

24. The adjustable display rack of Claim 23, wherein said spacer block can optionally be used to secure said track into position, and stably increase or decrease the separation of said tracks or tracks and dividers to accommodate merchandise of different widths.

25. The adjustable display rack of Claim 23, wherein said spacer block is positioned on the rails whereby said pusher block is spaced apart from said front panel when in a forwardmost position.

26. The adjustable display rack of Claim 7, wherein said divider has an upside-down T-shape or L-shape in cross-section.

27. The adjustable display rack of Claim 7, wherein said adjustable display rack is formed of a lubricious material.

28. The adjustable display rack of Claim 7, wherein said adjustable display rack is coated with silicone.

29. The adjustable display rack of Claim 7, wherein said product tracks are secured into position by falling into a series of grooves within said races on said front panel and said rear panel.

30. The adjustable display rack of Claim 7 further comprising a stopping member holding said pusher block at a distance from said front panel.

31. The adjustable display rack of Claim 30 wherein said stopping member is adjacent said front panel.

5 32. The adjustable display rack of Claim 31 wherein said stopping member is a screw or a rivet.

33. An adjustable display rack for storing and displaying products in a shelf-like orientation, said display rack comprising:

10 a frame having a front panel and a rear panel arranged generally parallel to each other and being a fixed distance apart from one another, said front panel and said rear panel each having a race extending along its length;

one or more product tracks generally having collinear raised rails extending generally transverse to said front panel and said rear panels, said rails having a generally T-shape cross-sections;

15 a removable pusher block slidably attached to said product track;

said pusher block having at least two sets of opposing flanges, each said set of opposing flanges attach to one of said rails at more than the top and outside surface of said rail, said rail being secured between said set of opposing flanges;

20 a biasing member urging said pusher block forward; and

a pusher block and track combination comprising a track with a pair of raised rails, each rail having two generally T-shaped ridges, the combination further comprising a pusher block with two sets of opposing flanges, wherein each set of said two sets of opposing flanges attaches to one of said rails at more than the top and outside surface of said rail, whereby each said rail is captured between each corresponding set of opposing flanges.

34. A display rack for storing and displaying products, comprising:

30 1) a track to underlie a plurality of said products, said track extending longitudinally between a first end and a second end, said track comprising a first side and a second side;

2) a product pusher which reciprocates along the longitude of said track;

3) a spring biasing said product pusher toward said first end of said track; and

4) a sliding connection between said track and said product pusher, said sliding connection comprising:

5 a) a first pair of surfaces and a second pair of surfaces, said first pair of surfaces located adjacent said first side of said track and said second pair located adjacent said second side of said track, one surface of each of said first pair of surfaces and said second pair of surfaces being on said track and the other surface of each of said first and second pairs being on said product pusher, said 10 first and second pairs of surfaces engaging to resist separation of said product pusher from said track, and

b) a third pair of surfaces, located between said first side of said track and said second side of said track, one surface of said third pair being on said track and the other surface of said third pair being on said product pusher, 15 said third pair of surfaces engaging to resist separation of said product pusher from said track.

35. The display rack of Claim 34 further comprising a fourth pair of surfaces, formed separate of said third pair of surfaces, located between said first side of said track and said second side of said track, one surface of said fourth pair being on said track and the other surface of said fourth pair being on said product pusher, said 20 fourth pair of surfaces engaging to resist separation of said product pusher from said track.

36. A display rack for storing and displaying products, comprising:

25 1) at least three tracks, each configured to underlie a different one of at least three parallel rows of said products, each of said three tracks extending longitudinally between first and second ends;

2) at least three product pushers, each of which reciprocates along the longitude of one of said three tracks;

30 3) at least three springs, each of which biases one of said three parallel rows of said products toward said first end of one of said three tracks; and

4) first and second guides, said first guide lying transverse to the longitudinal extensions of each of said three tracks and slidably engaging each of said three tracks adjacent to said first end of each of said three tracks, said second guide lying transverse to the longitudinal extensions of each of said three tracks and slidably engaging said second end of each of said three tracks, whereby said three tracks are capable of transverse movement along said first and second guides.

37. A method of displaying products, comprising:  
placing products in at least three parallel rows on product tracks;  
pushing each of said three parallel rows along said product tracks in a direction toward a vending position; and  
adjusting each of said product tracks laterally to accommodate the size of said products, while slidably capturing both ends of said product tracks and guiding both ends of each of said product tracks to maintain said product tracks parallel to one another during said adjusting.

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